# VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018 KARNATAKA



Mini Project Report (18ECMP68)

ON

"Smart Dustbin Using Arduino UNO"

Submitted in partial fulfillment of the requirement for the award of degree

BACHELOR OF ENGINEERING

IN

**ELECTRONICS & COMMUNICATION ENGINEERING** 

Submitted by:

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Under the Guidance of:

Prof. yogeesh M

Asst. Professor Dept of ECE, SIE I Tumknen



## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

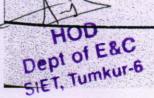
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Sira Road, Tumkur-572106

2021-2022

2021-2022

PRINCIPAL SIET., TUMAKURU



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### DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

## Certificate

This is to Certified that the mini project work (18ECMP68) entitled "Smart Dustbin Using Arduino UNO" has been Successfully carried out by ARUN N R (USN: 1SV18EC003) ,DARSHAN M MANCHIKOPPA(USN:1SV19EC009), a bonafide students of Shridevi Institute of Engineering and Technology, Tumkur- 572106, in partial fulfillment for the award of Bachelor Of Engineering in Electronics & Communication Engineering of the Vishvesvaraya Technological University, Jnana Sangama, Belagavi -590018, during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for internal assessments have been incorporated in the report. The mini project report has been approved as it satisfies the academic requirement with respect to the mini project work prescribed for the said Bachelor Of Engineering degree.

Signature of the guide

Prof. Yogeesh M Asst. professor Dept. of ECE., SIET Tumakuru

Signature of the HOD

Prof. Aijaz Ahamed Sharief HOD Dept. of ECE., SIET

Tumakuru

Signature of the principal

Dr. Narendra Vishwanath Principal SIET, Tumakuru

EXTERNAL VIVA

Name of examiners:

Signature with date:

PRINCIPAL

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#### ABSRACT

The main objective of the project is to design a smart dustbin which will help in keeping our environment clean and also eco friendly. We are inspired from Swaach Bharat Mission. Nowadays technologies are getting smarter day-by-day so, as to clean the environment we are designing a smart dustbin by using Arduino. This smart dustbin management system is built on the microcontroller based system having ultrasonic sensors on the dustbin. If dustbin is not maintained than these can cause an unhealthy environment and can cause pollute that affect our health. In this proposed technology we have designed a smart dustbin using ARDUINO UNO, along with ultrasonic sensor, servo motor, and battery jumper wire. After all hardware and software connection, now Smart Dustbin program will be run. Dustbin will open when someone comes near at some range than wait for user to put garbage and close it. For social it will help toward health and hygiene, for business for we try to make it affordable to many as many possible. So that normal people to rich people can take benefit from it..

PRINCIPAL SIET., TUMAKURU